

Algebra II
Unit 6 Review

Name _____
Date _____

I. Solve the quadratic equations using the square root property.

1) $a^2 - 12 = 16$

2) $4(x^2 - 4) - 1 = 2$

3) $(2m - 1)^2 = -8$

II. Solve the quadratic equations by completing the square.

4) $x^2 + 12x + 4 = 0$

5) $x^2 - 9x + 21 = -4$

6) $2x^2 - 20x + 18 = -6$

7) $4x^2 + 4x = 3$

III. Solve the quadratic equations using factoring.

8) $x^2 + 5 = 14$

9) $6c^2 + 11c + 4 = 0$

10) $2x^2 + 13x - 8 = 16$

11) $4x^2 + 4x = 3$

IV. Solve the quadratic equations using the quadratic formula.

12) $2x^2 + 5x - 7 = 0$

13) $4x^2 - 8x + 13 = 0$

14) $3x^2 + 5x = 7$

15) $6a^2 - a + 24 = 0$

V. Identify the value of the discriminant, and use it to determine the type and number of solutions each quadratic will have.

16) $2x^2 + 7x + 6 = 0$

17) $3x^2 - 5x - 6 = 0$

18) $x^2 - 8x = -16$

19) $6x^2 - 2x + 5 = 0$